

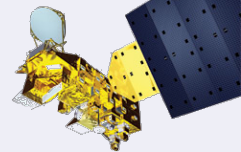
AIRS Project Status

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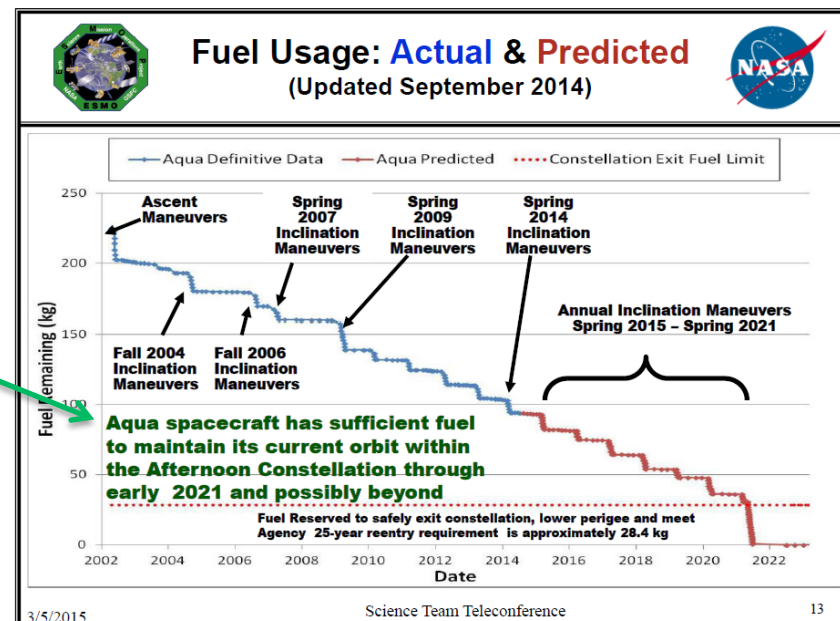
April 22, 2015

AIRS Operations and Calibration



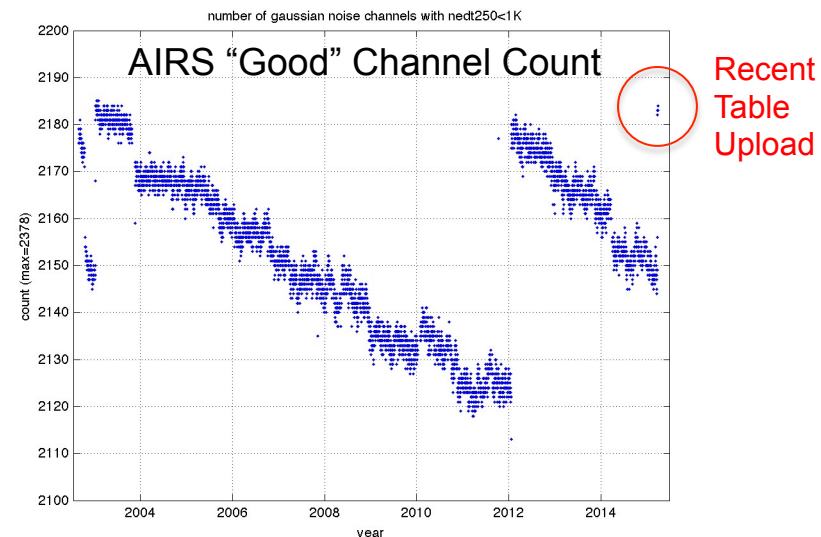
Instrument Operations

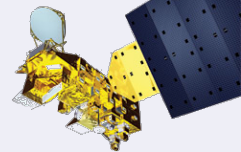
- AIRS Instrument Healthy and Stable
- Except for channels 4 and 5, AMSU-A is also healthy
- Aqua Spacecraft Healthy
 - “The Aqua spacecraft has sufficient fuel to maintain its current orbit within the Afternoon Constellation through early 2022 and possibly beyond”
 - Array Regulator Electronics (ARE)-6C Anomaly. **10** of 132 total strings (11 strings each on the 12 solar panels) lost to date. No impact to operations.



Instrument Calibration

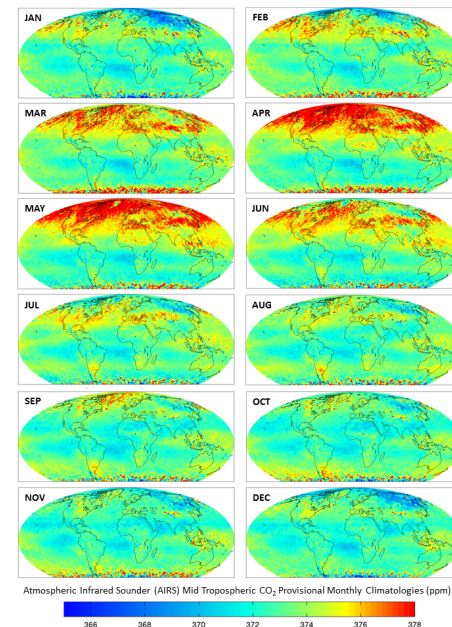
- Level 1C Replaces Noisy Channels, Fills Gaps. Documentation Complete. Available at the GES/DISC. See Evan Manning’s Talk.
- Gain table updates complete. Cal Sequences performed
- Re-measuring scan mirror witness samples to improve radiometric cal





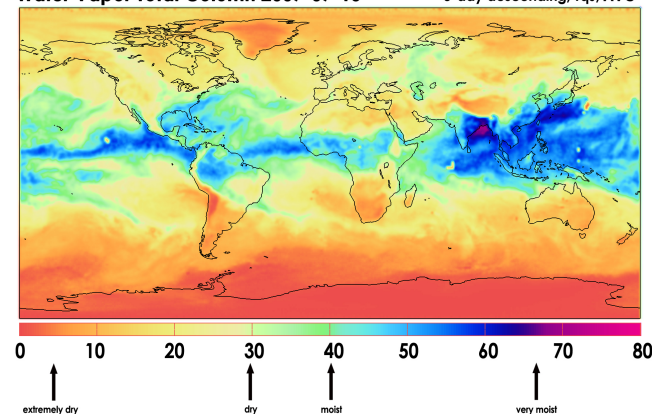
- V6 Product Maintenance
 - Continue evaluation of operational data stream
 - AIRS-Only reprocessing finished
 - GSFC Discovered issue with day/night TWP, and O3. Fix in place (see Susskind). Reprocess?
- V7: (See next slide)
- Data Product Validation
 - V6 Validation Plan in Review (See Fetzer Talk)
 - Near surface temperature and water vapor data product validation well underway
 - AIRS V5 Climatology Product to be released this summer
 - AIRS T,q, climatology products under development
- AIRS Applications Products Development
 - Standard Products for GIBS Under Development
 - Numerous products in Research and Validation
- OSSE Support and Simulator Development
 - OSSE Support to NOAA (Atlas) Complete
 - AIRS Response to Boundary Layer Variability Underway

V5 CO₂ Climatology

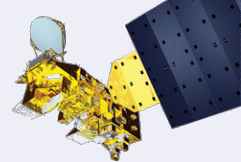


Water Vapor Total Column 2007-07-15

3-day descending, TqJ, AVG



Version 7: Expect to Upgrade All Products



- Level 1: Radiance Products
 - L1B: Update algorithms, QC, calibration coefficients and tables
 - L1C: Update algorithms, etc.
- Level 2: Swath Products
 - L2 Science and NRT: Update of V6 L2 (Susskind)
 - L2 Research: Individual PGE's by ROSES supported scientists
 - Multiple PGE's, Multiple Product Files, Multiple Data Repositories???
- Level 3: Gridded Products
 - L3 Science. Based on V7 L2 Sci/NRT products. Same L3 algorithm as V6?
 - L3 Research: Based on V7 L2 Research products
- Level 4 & Applications Products
 - L4: Continue to develop imagery and app's products based on V6 Sci/NRT
- Climatologies
 - Based on V6 for all products
- Aggressive Schedule: Delivery of V7 in Fall of 2017
 - Goal: Processing of AIRS and CrIS with a single system and fully tested/validated products